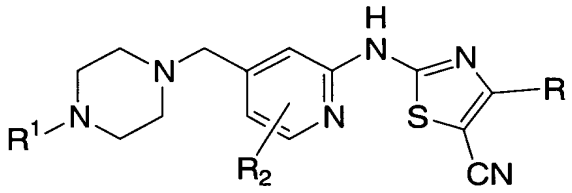
WHAT IS CLAIMED IS:

1. A process for preparing a compound of Formula I:



I

or a pharmaceutically acceptable salt or stereoisomer thereof,
wherein
R is H, unsubstituted or substituted C_1-C_{10} alkyl or unsubstituted or substituted aryl;

R^1 is $-C(=O)NR^3H$;

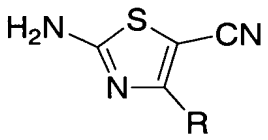
R^2 is

1) H,
2) OH,
3) OC_1-C_6 alkyl,
4) C_1-C_6 alkyl, or
5) halo; and

R^3 is C_1-C_6 alkyl;

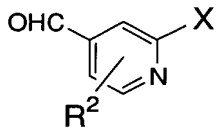
which comprises the steps of:

a) preparing a slurry of a compound of Formula II



II

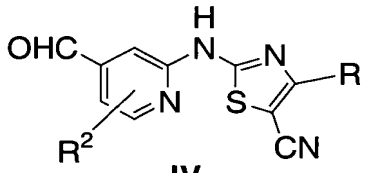
(where R is defined above), a compound of Formula III



III

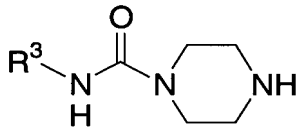
(where X is a halo and R^2 is defined above) and a base in a solvent;

b) adding a palladium catalyst and a bisphosphine ligand to the slurry to produce a coupling product of Formula IV



IV ;

c) adding a piperazine-urea of Formula V



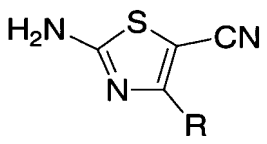
V

to the coupling product of Formula IV; and

d) completing a reductive amination to produce the compound of Formula I.

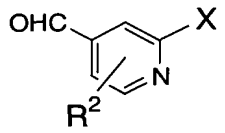
2. The process according to Claim 1 comprising the steps of:

a) preparing a slurry of a compound of Formula II



II

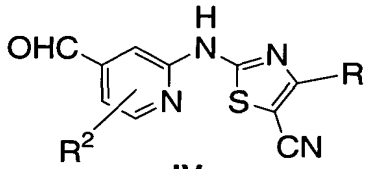
(where R is defined above), a compound of Formula III



III

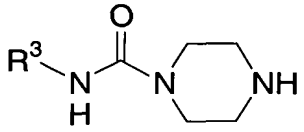
(where X is a halo and R^2 is defined above) and a phosphate in a solvent;

b) adding $Pd_2(dba)_3$ and Xantphos to the slurry to produce a coupling product of Formula IV



IV ;

c) adding a piperazine-urea of Formula V



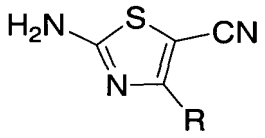
V

to the coupling product of Formula IV; and

d) completing a reductive amination to produce the compound of Formula I.

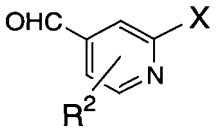
3. The process according to Claim 1 which comprises the steps of:

a) preparing a slurry of a compound of Formula II



II

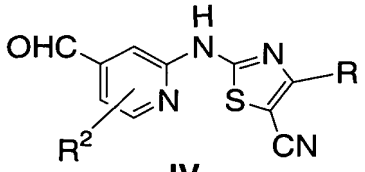
(where R is defined above), a compound of Formula III



III

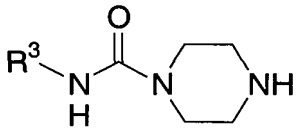
(where X is a halo and R^2 is defined above) and a carbonate in a solvent;

b) adding $Pd_2(dba)_3$ and Xantphos to the slurry to produce a coupling product of Formula IV



IV ;

c) adding a piperazine-urea of Formula V



V

to the coupling product of Formula IV; and

d) completing a reductive amination to produce the compound of Formula I.

4. A process for preparing 4-[2-(5-cyano-thiazol-2-ylamino)-pyridin-4-ylmethyl]-piperazine-1-carboxylic acid methylamide which comprises the steps of:

a) preparing a slurry of 2-chloro-4-formylpyridine, 2-aminothiazole and K_3PO_4 in toluene;

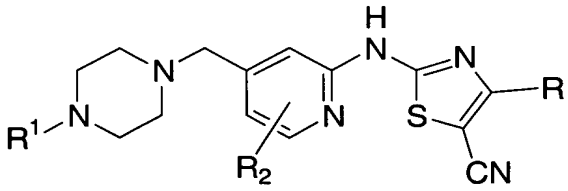
b) adding $Pd_2(dba)_3$ and Xantphos to the slurry to produce a coupling product;

c) adding N-methylaminocarbonylpiperazine in DMAc to the coupling product; and

d) completing a reductive amination by adding Et3N, acetic acid and NaBH(OAc)3 to produce 4-[2-(5-cyano-thiazol-2-ylamino)-pyridin-4-ylmethyl]-piperazine-1-carboxylic acid methylamide.

5. The process according to Claim 4 which further comprises the step of adding $Pd_2(dba)_3$ and Xantphos to the slurry and heating to a temperature of about 60°C to about 100°C to produce a coupling product.

6. A process for preparing a compound of Formula I



I

or a pharmaceutically acceptable salt or stereoisomer thereof,
wherein
R is H, unsubstituted or substituted C_1-C_{10} alkyl or unsubstituted or substituted aryl;

R^1 is $-C(=O)NR^3H$;

R^2 is

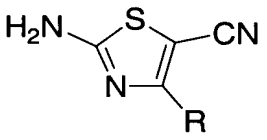
1) H,
2) OH,

3) OC_1-C_6 alkyl,
4) C_1-C_6 alkyl, or
5) halo; and

R^3 is C_1-C_6 alkyl;

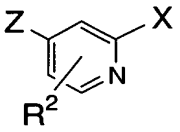
which comprises the steps of:

a) preparing a slurry of a compound of Formula II



II

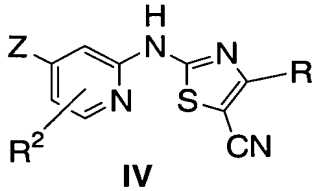
(where R is defined above), a compound of Formula III



III

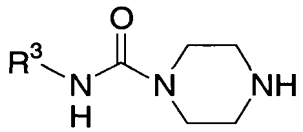
(where Z is CN or CO_2H; X is a halo and R^2 is defined above) and a base in a solvent;

b) adding a palladium catalyst and a bisphosphine ligand to the slurry to produce a coupling product of Formula IV



IV ;

c) reducing the coupling product of Formula IV;
d) adding a piperazine-urea of Formula V

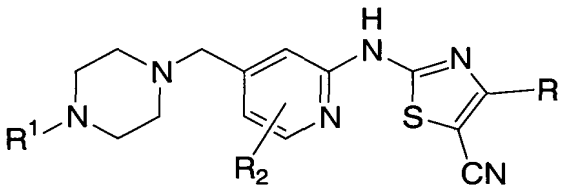


V

to the coupling product of Formula IV; and

e) completing a reductive amination to produce the compound of Formula I.

7. A process for preparing a compound of Formula I



I

or a pharmaceutically acceptable salt or stereoisomer thereof,

wherein

R is H, unsubstituted or substituted C_1-C_{10} alkyl or unsubstituted or substituted aryl;

R^1 is $-C(=O)NR^3H$;

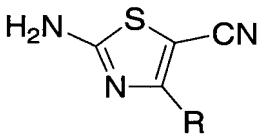
R^2 is

1) H,
2) OH,
3) OC_1-C_6 alkyl,
4) C_1-C_6 alkyl, or
5) halo; and

R^3 is C_1-C_6 alkyl;

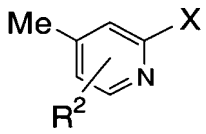
which comprises the steps of:

a) preparing a slurry of a compound of Formula II



II

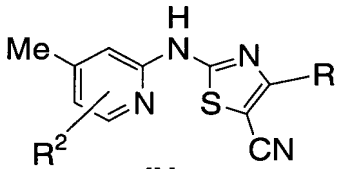
(where R is defined above), a compound of Formula III



III

(where X is a halo and R^2 is defined above) and a base in a solvent;

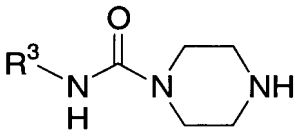
b) adding a palladium catalyst and a bisphosphine ligand to the slurry to produce a coupling product of Formula IV



IV ;

c) halogenating the coupling product of Formula IV;

d) adding a piperazine-urea of Formula V

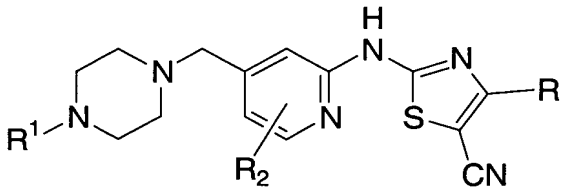


V

to the coupling product of Formula IV; and

e) completing a reductive amination to produce the compound of Formula I.

8. A process for preparing a compound of Formula I



I

or a pharmaceutically acceptable salt or stereoisomer thereof,

wherein

R is H, unsubstituted or substituted C_1-C_{10} alkyl or unsubstituted or substituted aryl;

R^1 is $-C(=O)NR^3H$;

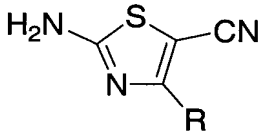
R^2 is

1) H,
2) OH,
3) OC_1-C_6 alkyl,
4) C_1-C_6 alkyl, or
5) halo; and

R^3 is C_1-C_6 alkyl;

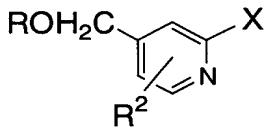
which comprises the steps of:

a) preparing a slurry of a compound of Formula II



II

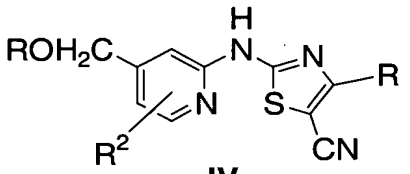
(where R is defined above), a compound of Formula III



III

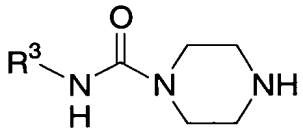
(where X is a halo and, R and R^2 are defined above) and a base in a solvent;

b) adding a palladium catalyst and a bisphosphine ligand to the slurry to produce a coupling product of Formula IV



IV ;

c) adding a piperazine-urea of Formula V



V

to the coupling product of Formula IV; and

d) completing a reductive amination to produce the compound of Formula I.

9. A process for preparing Xantphos comprising the steps of:

a) adding MTBE, 9,9-dimethylxanthene and TMEDA to produce a solution;

b) adding *s*-BuLi to the solution to produce a mixture;

c) slowly adding Ph_2PCl to produce a resulting mixture;

d) aging the resulting mixture and adding more Ph_2PCl; and

e) filtering to isolate Xantphos.